Bedienungsanleitung - Operating Instructions - Mode d'emploi

LAMINATED BUSBAR MACHINING UNIT

2008

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ALFRA lamination punching and cutting unit

Performance data

Area of use:

- Cutting and perforating laminated copper and aluminium busbars
- Cutting thicknesses: max. 10 mm
- Perforation range: Through-holes for screws M6 – M14
- Dimensions H x W x D: 380 x 350 x 150

Pressure generation:

- As the drive unit, we recommend our foot pump Prod.-No. 02121 or our electro-hydraulic pump DSP 120 Prod.-No. 02027

General description an operating instructions for the laminated punching and cutting unit, complete version

Configuration:

Work unit
Lamination punching / cutting unit, consisting of:
Basic unit, cutting block, hole-punching tool (die and die plate)

Basic units
For holding: Cutting block
Hole-punching tools

The pressure unit, consisting of the hydraulic piston and cylinder (including the die holder in the upper section) is permanently integrated into the basic unit.

The lower section contains the central locating hole for the die plate and cutting block insert.

Stops are also fitted at the front and sides for perforation in the unit. For self-assembly, the retaining rods must be fitted centrally in the base plate into the threaded holes provided for that purpose. For this, fit the long stop on the narrow side and the short stop on the wide side of the base plate.

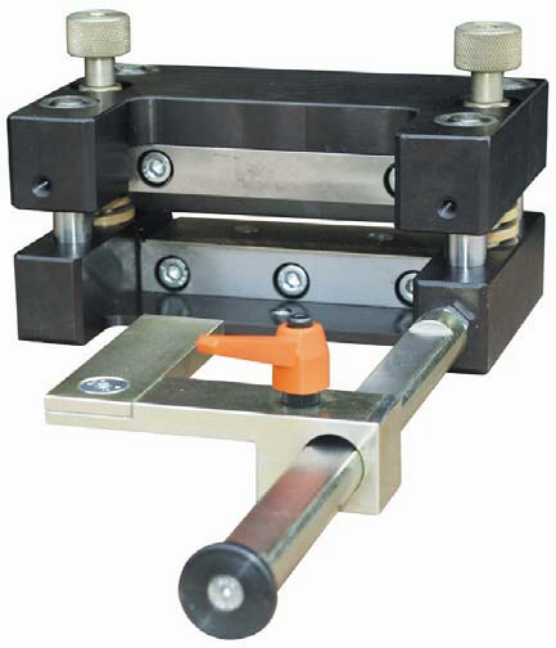
Cutting block

Cutting unit for waste-free cutting through of aluminium or copper rails.

Assembly:

- Fitting the stop into the bottom plate of the cutting block (screw in and lock in the threaded hole provided).
- Insert the cutting block into the locating hole of the basic unit.
  When doing this, ensure that it engages correctly into the centring pin.
- Brace on the right and left against the upper section using knurled nuts.

Pressing is always with the piston without a union nut



The cutting process:

- Check that the tool is clamped with the basic unit.
- Insert the material as far as it will go.
- Start the cutting process.
- End it after you hear the snapping noise from the cut.
- Unintentional continuation of the work process causes no damage if original units are connected to each other. In this case, the overpressure regulation of the hydraulic unit comes into effect.
- In exceptional cases, it is possible to cut laminated material up to max. 12 mm. This requires removal of the inlay plate in the lower section.

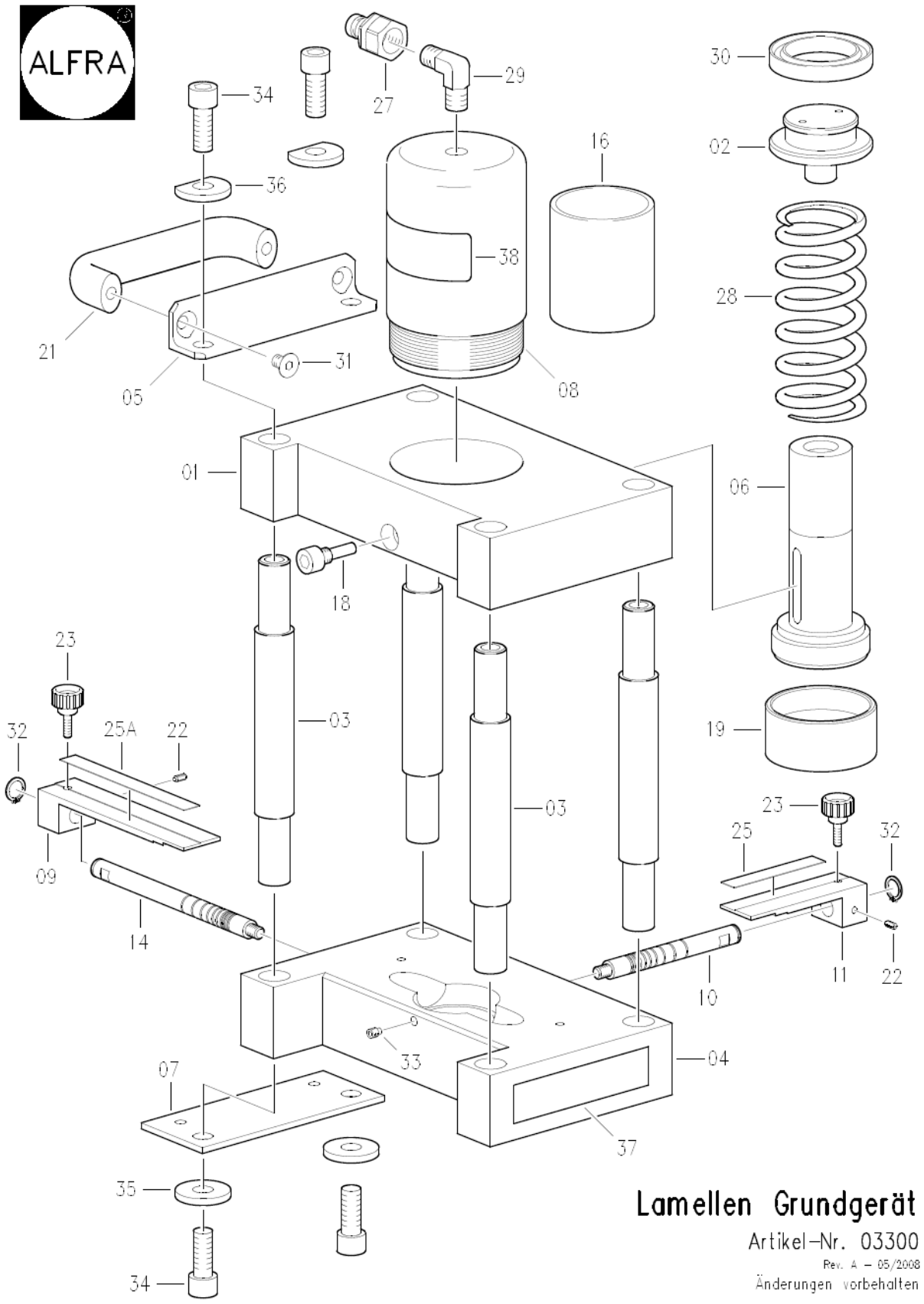
Perforating tool

Assembly:

- Insert the die plate into the locating hole of the basic unit.
- Place the die that matches the die plate into the die holder and clamp it securely in place with the union nut (19).
- Adjust the side and front stop as required.

The punching process:

- Start the punching process.
- End it after you hear the snapping noise from the cut.
- Unintentional continuation of the work process causes no damage if original units are connected to each other. In this case, the overpressure regulation of the hydraulic unit comes into effect.



Lamellen Grundgerät

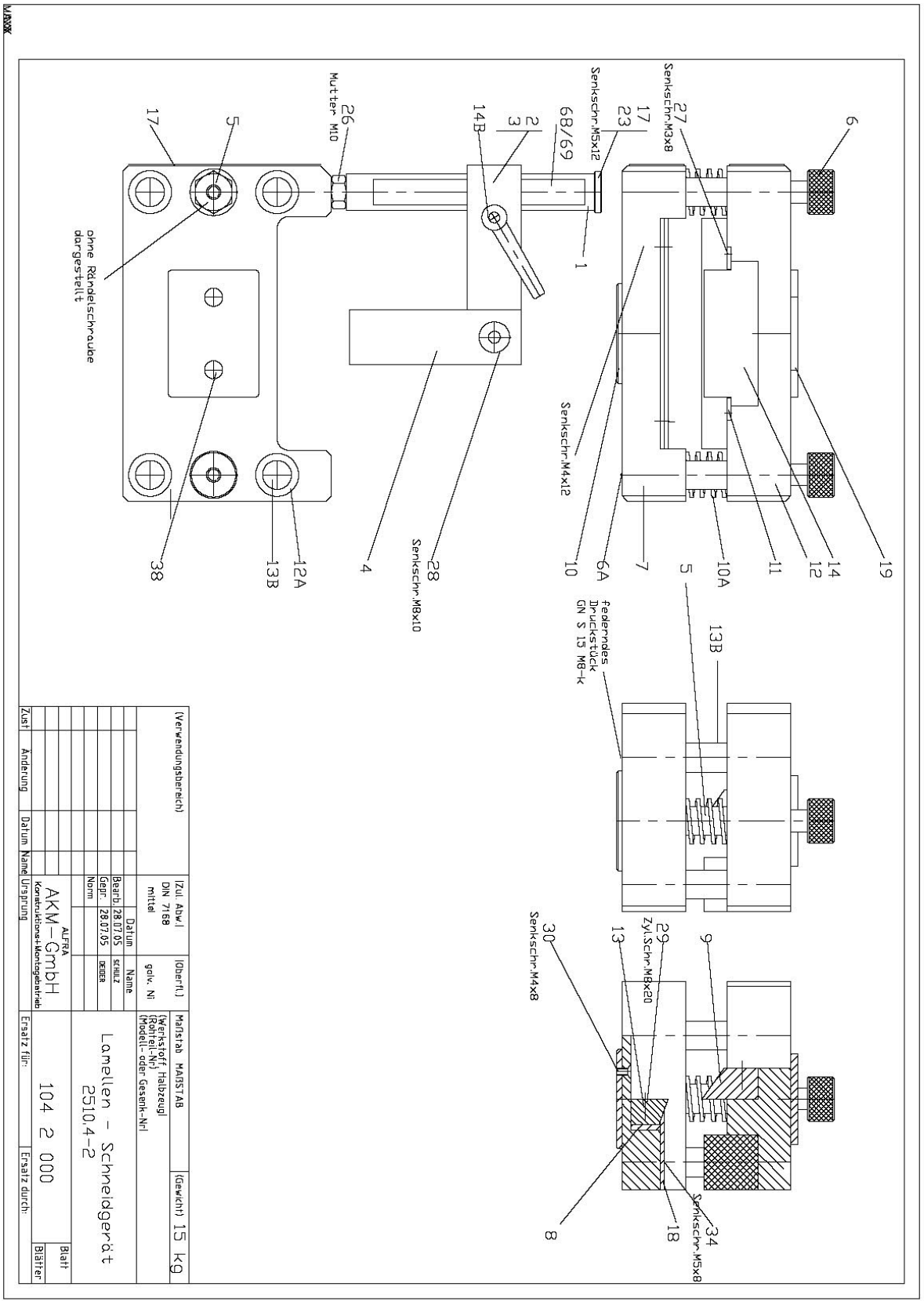
Artikel-Nr. 03300

Rev. A – 05/2008

Änderungen vorbehalten

Stückliste Art.Nr.03300 Lamellen Grundgerät				Rev.A - 05 / 2008	
1	2	3	4	5	6
Pos.	Menge	Einheit	Benennung	Sachnummer	Bemerkung
				Norm-Kurzbezeichnung	
1	1	Stk.	Oberplatte	03300-001	150x242x48mm C45K
2	1	Stk.	Kolbeneinsatz gehärtet	03300-002	Ø65x42mm C45
3	4	Stk.	Säule	03300-003	Ø25x217mm C45
4	1	Stk.	Grundplatte	03300-004	150x242x48mm C45K
5	2	Stk.	Winkel	03300-005	30x30x4x150mm St37
6	1	Stk.	Kolben	03300-006	Ø65x139mm C45
7	2	Stk.	Beilage	03300-007	150x60x4mm St37
8	1	Stk.	Zylinder	03300-008	Ø88x138mm C45
9	1	Stk.	Anschlag 142,5mm	03300-009	25x30x142,5mm St37
10	1	Stk.	Bolzen 115mm	03300-010	Ø12h9x115mm St37
11	1	Stk.	Anschlag 95mm	03300-011	25x30x95mm St37
12		Stk.	XXXXX	XXXXX	
13		Stk.	XXXXX	XXXXX	
14	1	Stk.	Bolzen 160mm	03300-014	Ø12h9x160mm St37
15		Stk.	XXXXX	XXXXX	
16	1	Stk.	Anschlagring gehärtet	03300-016	Ø64,5x75mm 16MnCr5
17		Stk.	XXXXX	XXXXX	
18	1	Stk.	Zylinderschraube ISO 4762-M10x30-8.8	03300-018	bearbeitet DIN 912
19	1	Stk.	Überwurfmutter	03300-019	Ø70x34 mm C15
20		Stk.	XXXXX	XXXXX	
21	2	Stk.	Bügelgriff	03300-021	GN565-26-128-SW
22	2	Stk.	Federndes Druckstück	03300-022	GN615-M4-K
23	2	Stk.	Rändelschraube	03300-023	GN591-20-M5-16
24		Stk.	XXXXX	XXXXX	
25	1	Stk.	Stahlmaß 0 - 75 mm	03300-025	
25A	1	Stk.	Stahlmaß 0 - 122 mm	03300-025A	
26		Stk.	XXXXX	XXXXX	
27	1	Stk.	Nippel 1/4" NPT IG	03200-077	1/4" NPT IG
28	1	Stk.	Druckfeder d=7 Dm=50 LO=126 n=6	03200-076	d=7 Dm=50 LO=126 n=6
29	1	Stk.	Winkeleinschraubadapter A04NM-04NM90K	03200-077A	1/4" NPT AG 90°
30	1	Stk.	Zylinderdichtung 45x65x10	03200-079	
31	4	Stk.	Senkschraube ISO 10642 - M8 x 12 - 8.8	DIN7991-M8x12-8.8	DIN 7991
32	2	Stk.	Sicherungsring DIN 471 - 12 x 1	DIN471-12x1	für Welle
33	1	Stk.	Gewindestift DIN 915 - M6 x 6 - 45H	DIN915-M6x6-45H	
34	8	Stk.	Zylinderschraube ISO 4762 - M12 x 30 - 12.9	DIN912-M12x30-12.9	DIN 912
35	4	Stk.	Scheibe DIN 6340 - A13 (vergütet)	DIN6340-A13	
36	4	Stk.	Scheibe DIN 6340 - A13 (vergütet) bearbeitet	03300-036	
37	1	Stk.	Typenschild	03300-037	
38	1	Stk.	Aufkleber "Made In Germany" (mittel)	609.305/107	

Cutting unit Prod.-No. 03301



ALFRA lamination machining basic unit, Prod.-No. 03300

Order No.	Drawing Part	Unit	Designation
1041001	1	Lamination machining basic unit	Top plate
1041002	2	Lamination machining basic unit	Piston insert
1041003	3	Lamination machining basic unit	Column 4x
1041004	4	Lamination machining basic unit	Base plate
1041005	5	Lamination machining basic unit	Angle 2x
1041006	6	Lamination machining basic unit	Piston
1041007	7	Lamination machining basic unit	Shim 2x
1041008	8	Lamination machining basic unit	Cylinder
1041009	9	Lamination machining basic unit	Stop
1041010	10	Lamination machining basic unit	Pin
1041011	11	Lamination machining basic unit	Stop
1041014	14	Lamination machining basic unit	Pin
1041016	16	Lamination machining basic unit	Pipe
1041018	18	Lamination machining basic unit	Screw
1041019	19	Lamination machining basic unit	Union nut
1041021	21	Lamination machining basic unit	Curved handle
1041022	22	Lamination machining basic unit	Spring-loaded pressure piece
1041023	23	Lamination machining basic unit	Hydraulic nipple
1041024	24	Lamination machining basic unit	Knurled screw
1041025	25	Lamination machining basic unit	Rule
1041026	26	Lamination machining basic unit	U washer 12.4
1041028	28	Lamination machining basic unit	Compression spring
1041029	29	Lamination machining basic unit	Angle adapter
1041030	30	Lamination machining basic unit	Cylinder seal
1041032	32	Lamination machining basic unit	Retaining ring
1041034	34	Lamination machining basic unit	Fillister head screw M12x30

ALFRA lamination cutting unit cutting block, Prod.-No. 03301

Order No.:	Drawing Part	Unit	Designation
1042001	1	Cutting unit	Axis / guide for stop
1042002	2	Cutting unit	Bushing
1042003	3	Cutting unit	Holder
1042004	4	Cutting unit	Stop
1042005	5	Cutting unit	Threaded bolt
1042006	6	Cutting unit	Knurled nut
1042007	7	Cutting unit	Bottom plate
1042008	8	Cutting unit	Underlay
1042009	9	Cutting unit	Blade
1042010	10	Cutting unit	Centring plate
1042011	11	Cutting unit	Plate / holding plate for Eladur spring
1042012	12	Cutting unit	Top plate
1042013	13	Cutting unit	Blade / bottom blade
1042014	14	Cutting unit	Eladur spring for lamination machining
1042018	18	Cutting unit	Plate
1042019	19	Cutting unit	Pressure plate
1042510/A	10A	Cutting unit	Die spring S26x76/2
1042512A	12A	Cutting unit	Guide bushing 23.7 h 6 x 16H6 30lg
1042513	13B	Cutting unit	Guide column
1042514B	14B	Cutting unit	Clamping lever
1042515	68/69	Cutting unit	Steel measure
1042516	6A	Cutting unit	Spring-loaded pressure piece
1042517	17	Cutting unit	Blanking disk
1042523	23	Cutting unit	Countersunk screw M5x12
1042526	26	Cutting unit	Nut M10
1042527	27	Cutting unit	Countersunk screw M3x8
1042528	28	Cutting unit	Countersunk screw M8x10
1042529	29	Cutting unit	Fillister head screw M8x20
1042530	30	Cutting unit	Countersunk screw M4x8
1042534	34	Cutting unit	Countersunk screw M5x8
1042538	38	Cutting unit	Countersunk screw M5x8

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